UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/057,255	01/24/2002	Masashi Hamada	1232-4812	2744

27123 7590 05/03/2005

MORGAN & FINNEGAN, L.L.P.
3 WORLD FINANCIAL CENTER
NEW YORK, NY 10281-2101

EXAMINER	
SERRAO, RANODHI N	
ART UNIT	**PAPER NUMBER**
2141	

DATE MAILED: 05/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/057,255	HAMADA, MASASHI	
	Examiner	Art Unit	
	Ranodhi Serrao	2141	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 January 2002*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-84* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-84* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *24 January 2002* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 18, 19, 41, 42, 64, and 65 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 18, 19, 41, 42, 64, and 65, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Regarding claims 18, 19, 41, 42, 64, and 65, the phrase "or the like" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "or the like"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 5, 6, and 10-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Beeler, Jr. (5,189,020).

As per claim 1, Beeler, Jr. teaches a data management method using a network system which includes a server and a client terminal (column 9, lines 16-29), comprising: the reception step of making the server receive a user's data storage request from the client terminal (column 9, lines 4-15); the select step of making the server select a data server located in an area that has a predetermined relationship with an area set by a user (column 10, lines 20-31); and the storage step of making the server send data associated with the data storage request to the selected data server, and store the data in the selected data server (column 10, lines 20-31).

As per claim 3, Beeler, Jr. teaches wherein the select step includes the step of: making the server select a plurality of data servers, and the storage step includes the step of: sending data associated with the data storage request to the respective selected data servers, and storing the data in the selected data servers (column 9, line 50-column 10, line 2).

As per claim 5, Beeler, Jr. teaches the step of making the server encrypt the data associated with the data storage request, and wherein the storage step includes the step of: making the server send the data encrypted by different methods to the respective data servers, and store the data in the data servers (column 17, lines 10-21).

As per claim 6, Beeler, Jr. teaches the step of making the server periodically acquire the encrypted data from the data servers (column 17, lines 10-21); the step of making the server decrypt the acquired data; and the step of making the server compare the decrypted data (column 18, lines 7-19).

Claims 10-14 are rejected by Beeler, Jr. accordingly as per claim 1 above.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Beeler, Jr. (5,189,020) as applied to claim 1 above, and further in view of Bowman-Amuah (6,289,382). Beeler, Jr. teaches the limitations according to claim 1 above but fails to teach wherein the select step includes the step of: making the server select the data server located in an area other than the area set by the user. Bowman-Amuah teaches wherein the select step includes the step of: making the server select the data server located in an area other than the area set by the user (column 268, lines 23-37). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the above claim to add wherein the select step includes the step of: making the server select the data server located in an area other than the area set by the user in order to route an incoming request to the best server component available.

Claims 4, 7, and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beeler, Jr. (5,189,020) as applied to claims 1 and 3 above, and further in view of Satomi et al. (6,347,384).

As per claim 4, Beeler Jr. teaches the mentioned limitations of the above claims but fails to teach the step of making the server acquire disaster information from a disaster information database that provides disaster information, and search for an area with a low disaster rate of occurrence on the basis of the acquired disaster information, and wherein the select step includes the step of: making the server select at least the data server located in an area other than the area set by the user, and the data server located in the area with the low disaster rate of occurrence. Satomi et al. teaches the step of making the server acquire disaster information from a disaster information database that provides disaster information (column 2, line 63-column 3, line 23), and search for an area with a low disaster rate of occurrence on the basis of the acquired disaster information (column 3, lines 24-50), and wherein the select step includes the step of: making the server select at least the data server located in an area other than the area set by the user, and the data server located in the area with the low disaster rate of occurrence (column 2, lines 28-50). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the above claim to add the step of making the server acquire disaster information from a disaster information database that provides disaster information, and search for an area with a low disaster rate of occurrence on the basis of the acquired disaster information, and wherein the select step includes the step of: making the server select at least the data server located in an area other than the area set by the user, and the data server located in the area with the low disaster rate of occurrence in order to provide a system that is capable

of rapidly and effectively making and carrying out a plan for dealing with a disaster when it occurs.

As per claim 7, Beeler Jr. teaches the mentioned limitations of the above claims but fails to teach the step of making the server send to the client terminal an address of the data server that stores the data. Satomi et al. teaches the step of making the server send to the client terminal an address of the data server that stores the data (column 2, lines 51-62). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the above claim to add the step of making the server send to the client terminal an address of the data server that stores the data in order to meet the predefined priority of communication networks over which to reach a desired server.

As per claim 9, Beeler Jr. teaches the mentioned limitations of the above claims but fails to teach wherein information of the area set by the user is pre-stored in the server. Satomi et al. teaches wherein information of the area set by the user is pre-stored in the server (column 5, lines 14-39). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the above claim to add wherein information of the area set by the user is pre-stored in the server because the disaster relief file can then become a process plan for providing disaster relief thereby allowing disaster relief to follow in a controlled manner.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Beeler, Jr. (5,819,020) as applied to claims 1, 3, and 5 above, and further in view of Satomi et

al. (6,347,384) and Bowman-Amuah (6,289,382). Beeler Jr. teaches the mentioned limitations of the above claims but fails to teach the step of making the server send to the client terminal an address of the data server that stores the data, and a key used to decrypt the encrypted data. Satomi et al. teaches the step of making the server send to the client terminal an address of the data server that stores the data (column 2, lines 51-62). And Bowman-Amuah teaches a key used to decrypt the encrypted data (column 79, lines 39-41). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the above claim to add the step of making the server send to the client terminal an address of the data server that stores the data in order to meet the predefined priority of communication networks over which to reach a desired server. And a key used to decrypt the encrypted data in order to prevent unauthorized interception of data.

Claims 29, 30, 31, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beeler, Jr. (5,819,020) and Byrd et al. (6,069,941) as applied to claims 15 and 26 above, and further in view of Bowman-Amuah (6,289,382).

As per claim 29, Beeler, Jr. and Byrd et al. teach the mentioned limitations of claims 15 and 26 above but fail to teach wherein said checking means checks if data becomes fraudulent due to tampering of data. Bowman-Amuah however teaches wherein said checking means checks if data becomes fraudulent due to tampering of data (column 128, line 62-column 129, line 10). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the above claim to

add wherein said checking means checks if data becomes fraudulent due to tampering of data in order to fulfill distinct business services through well-defined interfaces.

As per claim 30, Beeler, Jr. and Byrd et al. teach the mentioned limitations of claims 15, 26, and 29 above but fail to teach wherein when said checking means determines that the data becomes fraudulent due to tampering of data, said checking means sends a message indicating this to a client device that issued the storage request of the data. Bowman-Amuah however teaches wherein when said checking means determines that the data becomes fraudulent due to tampering of data, said checking means sends a message indicating this to a client device that issued the storage request of the data (column 128, line 62-column 129, line 10). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the above claim to add wherein when said checking means determines that the data becomes fraudulent due to tampering of data, said checking means sends a message indicating this to a client device that issued the storage request of the data in order to fulfill distinct business services through well-defined interfaces.

As per claim 31, Beeler, Jr. and Byrd et al. teach the mentioned limitations of claim 15 above but fail to teach wherein said service control means includes authentication means for authenticating if the user who issued the storage request is a member who subscribes to the service, and accepts only the storage request from the user authenticated by said authentication means. Bowman-Amuah however teaches wherein said service control means includes authentication means for authenticating if the user who issued the storage request is a member who subscribes to the service,

and accepts only the storage request from the user authenticated by said authentication means (column 79, lines 4-13). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the above claim to add wherein said service control means includes authentication means for authenticating if the user who issued the storage request is a member who subscribes to the service, and accepts only the storage request from the user authenticated by said authentication means in order to prevent unauthorized interception of data.

As per claim 32, Beeler, Jr. and Byrd et al. teach the mentioned limitations of claim 15 above but fail to teach wherein said service control means includes authentication means for checking authenticity of the server selected by said select means, and said storage control means stores data associated with the storage request in only the server authenticated by said authentication means. Bowman-Amuah however teaches wherein said service control means includes authentication means for checking authenticity of the server selected by said select means, and said storage control means stores data associated with the storage request in only the server authenticated by said authentication means (column 81, lines 47-67). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the above claim to add wherein said service control means includes authentication means for checking authenticity of the server selected by said select means, and said storage control means stores data associated with the storage request in only the server authenticated by said authentication means in order to verify network access requests by validating that users are who they claim to be.

Claims 20 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beeler, Jr. (5,819,020) and Byrd et al. (6,069,941) as applied to claim 15 above, and further in view of Satomi et al. (6,347,384).

As per claim 20, Beeler, Jr. and Byrd et al. teach the mentioned limitations of claim 15 above but fail to teach wherein said select means selects the server on the basis of disaster information. Satomi et al. however teaches wherein said select means selects the server on the basis of disaster information (column 3, lines 24-50). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the above claim to add wherein said select means selects the server on the basis of disaster information in order to provide a system that is capable of rapidly and effectively making and carrying out a plan for dealing with a disaster when it occurs.

As per claim 22, Beeler, Jr. and Byrd et al. teach the mentioned limitations of claim 15 above but fail to teach wherein said select means selects a server with a lowest suffering risk from the servers corresponding to the service subscription qualification level of the user who issued the storage request, and a server with a lowest suffering risk of servers present in areas other than a location area of a client device that issued the storage request. Satomi et al. however teaches wherein said select means selects a server with a lowest suffering risk from the servers corresponding to the service subscription qualification level of the user who issued the storage request (column 3, lines 24-50), and a server with a lowest suffering risk of servers present in areas other than a location area of a client device that issued the storage request (column 2, lines 28-50). It would have been obvious to one having ordinary skill in the

art at the time of the invention to modify the above claim to add wherein said select means selects a server with a lowest suffering risk from the servers corresponding to the service subscription qualification level of the user who issued the storage request, and a server with a lowest suffering risk of servers present in areas other than a location area of a client device that issued the storage request in order to provide damage status on different degrees of damage of a disaster event.

Claims 15-19, 21, 23-28, and 33-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beeler, Jr. (5,819,020) and Byrd et al. (6,069,941).

As per claim 15, Beeler, Jr. teaches a data storage service apparatus which comprises a plurality of servers for storing data in response to a storage request via a network (column 9, lines 16-29); and storage control means for storing data associated with a storage request in the server selected by said select means (column 10, lines 20-31). Beeler, Jr. fails to teach service control means which includes select means for selecting the server in accordance with at least a user's service subscription qualification level. Byrd et al. teaches service control means which includes select means for selecting the server in accordance with at least a user's service subscription qualification level (column 5, lines 26-52). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the above claim to add service control means which includes select means for selecting the server in accordance with at least a user's service subscription qualification level in order to prevent a subscriber from obtaining additional service when their account has an insufficient balance.

As per claim 16, Beeler, Jr. and Byrd et al. teach the mentioned limitations of claim 15 above but Byrd et al. fails to teach wherein said select means selects at least two servers. Beeler, Jr. however teaches wherein said select means selects at least two servers (column 9, lines 16-29). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the above claim to add wherein said select means selects at least two servers in order to allow for data processing to be distributed to different computers so that each target computer has a copy of the source files, and the files are updated in real-time.

As per claim 17, Beeler, Jr. and Byrd et al. teach the mentioned limitations of claim 15 above but Byrd et al. fails to teach wherein said storage control means encrypts the data associated with the storage request using an encryption method corresponding to the server selected by said select means, and stores the encrypted data in the selected server. Beeler, Jr. however teaches wherein said storage control means encrypts the data associated with the storage request using an encryption method corresponding to the server selected by said select means, and stores the encrypted data in the selected server (column 17, lines 10-21). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the above claim to add wherein said storage control means encrypts the data associated with the storage request using an encryption method corresponding to the server selected by said select means, and stores the encrypted data in the selected server in order to prevent replicated data from being intercepted and compromised.

As per claim 18, Beeler, Jr. and Byrd et al. teach the mentioned limitations of claim 15 above but Beeler, Jr. fails to teach wherein the service subscription qualification level is determined based on a value such as a subscription fee or the like for a service. Byrd et al. however teaches wherein the service subscription qualification level is determined based on a value such as a subscription fee or the like for a service (column 2, lines 59-65). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the above claim to add wherein the service subscription qualification level is determined based on a value such as a subscription fee or the like for a service in order to monitor the amount of service being supplied to a subscriber.

As per claim 19, Beeler, Jr. and Byrd et al. teach the mentioned limitations of claim 15 above but Beeler, Jr. fails to teach wherein the service subscription qualification level is determined based on a service subscription term such as a number of years of subscription or the like. Byrd et al. however teaches the service subscription qualification level is determined based on a service subscription term such as a number of years of subscription or the like (column 2, lines 59-65). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the above claim to add the service subscription qualification level is determined based on a service subscription term such as a number of years of subscription or the like in order to monitor the amount of service being supplied to a subscriber.

As per claim 21, Beeler, Jr. and Byrd et al. teach the mentioned limitations of claim 15 above but Byrd et al. fails to teach wherein said select means selects the

server in consideration of a location area of a client device that issued the storage request. Beeler, Jr. however teaches wherein said select means selects the server in consideration of a location area of a client device that issued the storage request (column 10, lines 20-31). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the above claim to add wherein said select means selects the server in consideration of a location area of a client device that issued the storage request in order to copy files over the network to a centralized backup server, where they can be stored to a backup storage device.

As per claim 23, Beeler, Jr. and Byrd et al. teach the mentioned limitations of claim 15 above but Beeler, Jr. fails to teach wherein when the user's service subscription qualification level has changed, said select means re-selects the server, and said storage control means stores the data associated with the storage request again in the server re-selected by said select means. Byrd et al. however teaches wherein when the user's service subscription qualification level has changed, said select means re-selects the server (column 4, lines 27-48), and said storage control means stores the data associated with the storage request again in the server re-selected by said select means (column 4, lines 49-58). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the above claim to add wherein when the user's service subscription qualification level has changed, said select means re-selects the server, and said storage control means stores the data associated with the storage request again in the server re-selected by said select means in order to qualify the subscriber in accordance with the subscriber's telephone number.

As per claim 24, Beeler, Jr. and Byrd et al. teach the mentioned limitations of claim 15 above but Beeler, Jr. fails to teach wherein said select means re-selects the server in accordance with a change in disaster information, and said storage control means stores the data associated with the storage request again in the server re-selected by said select means. Byrd et al. however teaches wherein said select means re-selects the server in accordance with a change in disaster information (column 4, lines 27-48), and said storage control means stores the data associated with the storage request again in the server re-selected by said select means (column 4, lines 49-58). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the above claim to add wherein said select means re-selects the server in accordance with a change in disaster information, and said storage control means stores the data associated with the storage request again in the server re-selected by said select means in order to qualify the subscriber in accordance with the subscriber's telephone number.

As per claim 25, Beeler, Jr. and Byrd et al. teach the mentioned limitations of claim 15 above but Byrd et al. fails to teach wherein when a location area of a client device that issued the storage request has changed, said select means re-selects the server, and said storage control means stores the data associated with the storage request again in the server re-selected by said select means. Beeler, Jr. however teaches wherein when a location area of a client device that issued the storage request has changed (column 10, lines 32-47), said select means re-selects the server, and said storage control means stores the data associated with the storage request again in the

server re-selected by said select means (column 9, lines 4-15). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the above claim to add wherein when a location area of a client device that issued the storage request has changed, said select means re-selects the server, and said storage control means stores the data associated with the storage request again in the server re-selected by said select means in order to allow remote sites to maintain real-time updates on data files, and also provide a mechanism for effecting off-site backup storage of critical data.

As per claim 26, Beeler, Jr. and Byrd et al. teach the mentioned limitations of claim 15 above but Byrd et al. fails to teach wherein said service control means includes checking means for checking authenticity of the data stored in the server by said storage control means. Beeler, Jr. however teaches wherein said service control means includes checking means for checking authenticity of the data stored in the server by said storage control means (column 17, lines 9-21: wherein compression and encryption serves the function of authenticity). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the above claim to add wherein said service control means includes checking means for checking authenticity of the data stored in the server by said storage control means in order to prevent replicated data from being intercepted and compromised.

As per claim 27, Beeler, Jr. and Byrd et al. teach the mentioned limitations of claims 15 and 26 above but Byrd et al. fails to teach wherein said checking means checks authenticity by comparing data which are associated with an identical storage

request and are stored in a plurality of servers by said storage control means. Beeler, Jr. however teaches wherein said checking means checks authenticity by comparing data which are associated with an identical storage request and are stored in a plurality of servers by said storage control means (column 18, lines 7-19). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the above claim to add wherein said checking means checks authenticity by comparing data which are associated with an identical storage request and are stored in a plurality of servers by said storage control means in order to prevent replicated data from being intercepted and compromised.

As per claim 28, Beeler, Jr. and Byrd et al. teach the mentioned limitations of claims 15 above but Byrd et al. fails to teach wherein said checking means checks if data becomes fraudulent due to a memory medium. Beeler, Jr. however teaches wherein said checking means checks if data becomes fraudulent due to a memory medium (column 7, lines 34-41: wherein replication data is transmitted through a memory medium). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the above claim to add wherein said checking means checks if data becomes fraudulent due to a memory medium in order to prevent replicated data from being intercepted and compromised.

As per claim 33, Beeler, Jr. and Byrd et al. teach the mentioned limitations of claim 15 above but Byrd et al. fails to teach wherein said service control means includes notify means for sending at least various storage condition data associated with a data storage process of said storage control means to a client device that issued the storage

request. Beeler, Jr. however teaches wherein said service control means includes notify means for sending at least various storage condition data associated with a data storage process of said storage control means to a client device that issued the storage request (column 10, lines 20-31: wherein broadcasting a message serves the function of notify means. It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the above claim to add wherein said service control means includes notify means for sending at least various storage condition data associated with a data storage process of said storage control means to a client device that issued the storage request in order to determine if the node is configured as a target server.

As per claim 34, Beeler, Jr. and Byrd et al. teach the mentioned limitations of claims 15 and 33 above but Byrd et al. fails to teach wherein said notify means sends encryption algorithm and key data in addition to storage location data of the data associated with the storage request as the storage condition data. Beeler, Jr. however teaches wherein said notify means sends encryption algorithm and key data in addition to storage location data of the data associated with the storage request as the storage condition data (column 17, lines 9-21). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the above claim to add wherein said notify means sends encryption algorithm and key data in addition to storage location data of the data associated with the storage request as the storage condition data in order to replicate the operation described in each packet to the local storage media on target server and restore data to source server when necessary.

As per claim 35, Beeler, Jr. and Byrd et al. teach the mentioned limitations of claims 15 and 33 above but Byrd et al. fails to teach wherein the client device includes storage means for storing at least the storage condition data sent from said notify means. Beeler, Jr. however teaches wherein the client device includes storage means for storing at least the storage condition data sent from said notify means (column 10, line 65-column 11, line 10). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the above claim to add wherein the client device includes storage means for storing at least the storage condition data sent from said notify means in order to replicate the operation described in each packet to the local storage media on target server and restore data to source server when necessary.

As per claim 36, Beeler, Jr. and Byrd et al. teach the mentioned limitations of claims 15, 33, and 35 above but Byrd et al. fails to teach wherein said storage means is a storage medium detachable from the client device. Beeler, Jr. however teaches wherein said storage means is a storage medium detachable from the client device (column 9, lines 4-15: wherein backup tape serves the function of a detachable storage medium). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the above claim to add wherein said storage means is a storage medium detachable from the client device because if an error occurs on the file server which destroys some or all of the data on non-volatile storage media, the contents of the storage medium can be restored from backup storage media.

As per claim 37, Beeler, Jr. and Byrd et al. teach the mentioned limitations of claims 15, 33, and 35 above but Byrd et al. fails to teach wherein said storage means is

a storage medium built in the client device. Beeler, Jr. however teaches wherein said storage means is a storage medium built in the client device (column 8, line 58-column 9, line 3: wherein a hard disk is built in the client device). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the above claim to add wherein said storage means is a storage medium built in the client device in order to process the file modification requests and store any required changes to non-volatile storage media connected thereto through operating system calls.

Claims 38-84 are rejected by Beeler, Jr., Bowman-Amuah, Satomi et al., and Byrd et al. accordingly as per the above claims.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Nakagawa et al. (5,835,911) teaches a software distribution and maintenance system and method. Bisbee et al. (2001/0002485) teaches a system and method for electronic transmission, storage, and retrieval of authenticated electronic original documents. Weber (5,812,668) teaches a system, method and article of manufacture for verifying the operation of a remote transaction clearance system utilizing a multichannel, extensible, flexible architecture. Cornelius et al. (6,629,081) teaches an account settlement and financing in an e-commerce environment.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ranodhi Serrao whose telephone number is (571)272-7967. The examiner can normally be reached on 8:00-4:30pm, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on (571)272-3880. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RUPAL DHARIA
SUPERVISORY PATENT EXAMINER